BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer -yelahanka Division

Detailed Estimate

Name of the Work — **Providing Asphalting to Nagenahalli main and cross roads in ward No- 02 of yelahanka sub division.**

Estimate Amount : 4000000.00

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	CIVIL WORKS								
1	Removing & Refixing Stone Slabs of drains and Pointing in C.M(1:3)								
	(Page No 25., I.No.5.33 of KPWD S.R 2016-17)								
		Sqm							
	Basic rate	***76.00***							
	Area Wieght age @ 6%	***4.56***							
	Total Rate in Rs	***80.56***							
	4th Cross road from concrete road to OHT								
	Ch: (0 - 119)		2	119	0.90		214.20		
							214.20		
	Deduction for damaged and missing 15%						**-32.13**		
							182.07	**80.56**	**14667.56**
2	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3								
	(Page No142., I.No.19.1 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	***82.00***							
	Area Wieght age @ 6%	***4.92***							
	Total Rate in Rs	***86.92***							
	Desilting								
	4th Cross road from concrete road to OHT								
	Ch: (0 - 119)		2	119	0.60	0.400	57.12		
	new drain								
	Nagenahalli Main Road from Laxmi Enterprises to Railway Gate								
	RHS								
	Ch: (0 - 270)		1	270	1.20	0.900	291.60		
	Thammanna Mane Road								
	Ch: (0 - 40)		2	40	1.20	0.900	86.40		
	Cross Road 1 (Thammanna Mane Parallel Road)								
	Ch: (0 - 40)		1	40	1.20	0.900	43.20		
							478.32	**86.92**	**41575.57**
3	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregtes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted,in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications Specification No. KBS 4.1, 4.2								
	(Page No 12., I.No.4.2 of KPWD S.R 2016-17).								
		Cum.							
	Basic rate	***5046.00***							
	Area Wieght age @ 6%	***302.76***							
	Total Rate in Rs	***5348.76***							
	New drain								
	Nagenahalli Main Road from Laxmi Enterprises to Railway Gate								
	RHS								

ABR

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	Ch: (0 - 270)		1	270	0.90	0.125	30.38		
	Thammanna Mane Road								
	Ch: (0 - 40)		2	40	0.90	0.150	10.80		
	Cross Road 1 (Thammanna Mane Parallel Road)								
	Ch: (0 - 40)		1	40	0.90	0.150	5.40		
							46.58	**5348.76**	**249118.50**
4	Providing and laying Plain /reinforced cement concrete for side drains wall and bottom thickness 15cm using M20 nominal mix concrete with OPC cement at 300kg with 20mm and down size granite metal coarse aggregate at 0.69 cum and fine aggregate at 0.43 cum machine mixed well compacted for walls at bottom including centring shuttering cost of materials HOM of machineries curing etc completeexcluding cost of steel as per MORTH specification No.1500,1700,2200 **(Page No265., I.No.37.59.2 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*10408.00*							
	Area Wieght age @ 6%	*624.48*							
	Total Rate in Rs	*11032.48*							
	New drain								
	Raft								
	Nagenahalli Main Road from Laxmi Enterprises to Railway Gate								
	RHS								
	Ch: (0 - 270)		1	270	0.90	0.150	36.45		
	Thammanna Mane Road								
	Ch: (0 - 40)		2	40	0.90	0.150	10.80		
	Cross Road 1 (Thammanna Mane Parallel Road)								
	Ch: (0 - 40)		1	40	0.90	0.150	5.40		
	Wall								
	Nagenahalli Main Road from Laxmi Enterprises to Railway Gate								
	RHS								
	Ch: (0 - 270)		2	270	0.15	0.900	72.90		
	Thammanna Mane Road								
	Ch: (0 - 40)		4	40	0.15	0.900	21.60		
	Cross Road 1 (Thammanna Mane Parallel Road)								
	Ch: (0 - 40)		2	40	0.15	0.900	10.80		
							157.95	**11032.48**	**1742580.22**
5	KSRB 4.9.2 : Providing T .M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500 **(Page No 17., I.No.4.46.2 of KPWD S.R 2016-17).**								
		Tonne							
	Basic rate	*56050.00*							
	Area Wieght age @ 6%	*3363.00*							
	Total Rate in Rs	*59413.00*							
	New drain								
	Taking 60kg/cum								
							9.48		
							9.48	**59413.00**	**563057.00**
6	Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- **Data rate**								
		Sqm							
	Total Rate in Rs	*1757.00*							

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	For damaged Drain						32.13		
							32.13	**1757.00**	**56452.41**
							Sub total-1		**2667451.26**
							ROAD WORKS		
7	KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 **(Page No 143., I.No.19.14 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*46.00*							
	Area Wieght age @ 6%	*2.76*							
	Total Rate in Rs	*48.76*							
	Devaru mane Road								
	Ch: (0 - 30)		1	30	3.00	0.400	36.00		
	Near Nagenahalli Railway Gate from Nagenahalli Main Road								
	Ch: (0 - 70)		1	70	4.00	0.400	112.00		
							148.00	**48.76**	**7216.48**
8	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method Close graded granular sub-base material as per 400-1 For Grading- II Material **(Page No 155., I.No.20.5.2 of KPWD S.R 2016-17).**								
		Cum.							
	Basic rate	*1408.00*							
	Area Wieght age @ 6%	*84.48*							
	Total Rate in Rs	*1492.48*							
	Devaru mane Road								
	Ch: (0 - 30)		1	30	3.00	0.150	13.50		
	Near Nagenahalli Railway Gate from Nagenahalli Main Road								
	Ch: (0 - 70)		1	70	4.00	0.150	42.00		
							55.50	**1492.48**	**82832.64**
9	KSRRB M600-1. Construction of dry lean cement concrete mix CC 1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383,) aggregate cement ratio not to exceed 15:1,aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. MORTH Specification No. 601 **(Page No,-176, I.No.22.1 of KPWD S.R 2016-17)**								
		Cum.							
	Basic rate	*3761.00*							
	Area Wieght age @ 6%	*225.66*							
	Total Rate in Rs	*3986.66*							
	Devaru mane Road								
	Ch: (0 - 30)	ncc	1	30	3.00	0.100	9.00		
	Near Nagenahalli Railway Gate from Nagenahalli Main Road								
	Ch: (0 - 70)		1	70	4.00	0.100	28.00		
							37.00	**3986.66**	**147506.42**

AEE

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
10	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M30(at 360 kg per cum coarse aggregate @ 0.69 cum and fine aggregate @0.46 cum) , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specification .**(Page No 177., I.No.22.6.1 of KPWD S.R 2016-17).**								
	Basic rate	Cum.							
	Area Wieght age @ 6%	*5866.00*							
	Total Rate in Rs	*351.96*							
		6217.96							
	Devaru mane Road								
	Ch. (0 - 30)	ncc	1	30	3.00	0.150	13.50		
	Near Nagenahalli Railway Gate from Nagenahalli Main Road								
	Ch. (0 - 70)		1	70	4.00	0.150	42.00		
							55.50	**6217.96**	**345096.78**
11	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 **(Page No 161., I.No.21.2 of KPWD S.R 2016-17).**								
	Basic rate	Sqm							
	Area Wieght age @ 6%	*3.00*							
	Total Rate in Rs	*0.18*							
		3.18							
	4th Cross road from concrete road to OHT								
	Ch. (0 - 119)		1	119	8.00		952.00		
							952.00	**3.18**	**3027.36**
12	KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 **(Page No 161., I.No.21.7 of KPWD S.R 2016-17).**								
	Basic rate	*11.00*							
	Area Wieght age @ 6%	*0.66*							
	Total Rate in Rs	*11.66*							
	4th Cross road from concrete road to OHT								
	Ch. (0 - 119)		1	119	8.00		952.00		
							952.00	**11.66**	**11100.32**
13	KSRRB M500- 17. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and filler, transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500-10 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507								

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in ₹	Amount in Rs
				L in m	B in m	D in m			
	(Page No 163., I.No.21.17.6 of KPWD S.R 2016-17).								
	Basic rate	Cum. 6071.00							
	Area Wieght age @ 6%	364.26							
	Total Rate in Rs	6435.26							
	Profile correction								
	Taking 13% of the total area		1	123.76		0.05	6.19		
							6.19	6435.26	39821.39
14	KSRRB M500- 19. Providing, laying bituminousConcrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500.9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No 509								
	(Page No 165., I.No.21.22.6 of KPWD S.R 2016-17).								
	Basic rate	Cum. 6859.00							
	Area Wieght age @ 6%	411.54							
	Total Rate in Rs	7270.54							
	4th Cross road from concrete road to OHT								
	Ch. (0 - 119)		1	119	8.00	0.030	28.56		
							28.56	7270.54	207646.62
15	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to10kms.								
	(Refer Table. Page No.140)								
	Total Rate in Rs	Cum. 100.00							
	For item no			2		478.32			
	For item no			7		148.00			
	Sub total-1					626.32	100.00	62632.00	
	ROAD FURNITURES								906880.01
16	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35. The finished surface to be								
	(Page No 185, I.No 24.15 of KPWD S.R 2016-17)								
	Basic rate	Sqm 512.00							
	Area Wieght age @ 6%	30.72							
	Total Rate in Rs	542.72							

Sl. No.	Description of item	Unit	Nos	Dimension			Total Qty	Rate in Rs	Amount in Rs
				L in m	B in m	D in m			
	Road Marking								
	4th Cross road from concrete road to OHT								
	Ch: (0 - 119)		2.5	119	0.10		29.75		
							29.75	542.72	16145.92
	Sub Total-3								16145.92
	Total								3590477.19
17	Cost towards Preperation of DPR,PMC/QC @ 2%								71809.54
18	Cost of Plastic@ 8% of bitumen qty for BC	Kg	1	322.16				27.00	8698.23
19	Cost towards KIRDL Charges @ 9%								323142.95
20	Miscllenous and other charges								5872.08
	Grand Total								4000000.00

Certificate:-

1. That the workspot has been inspected and provisions made in the estimate are adequate and necessary
2. Work spot comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That estimate is based on the PWD SR of 2016-17
4. The work is not split up
5. These works are not taken up in any grants and free from defect liability period
6. Earlier improvements taken up in the proposed roads are recorded in road history

Consultant:
For M/s Mecadez Core Technologies pvt ltd

Asst. Engineer
Ward No:2
BBMP

AEE
yelahanka Sub division
BBMP

Executive Engineer
yelahanka division
BBMP

ADMINISTRATIVELY SANCTIONED FOR Rs. 40.00 lacs

Rupees Forty lakhs only

Under P. 3089.

Registered as EE ( )

Subject to conditions cont...

enclosed memo EE ( ) No.....

Dt..... Estimate A/S sanctioned

TE/Yel/RD/AS/42 1/16-17

dated 18.2.17 Rs 40.00 lacs

Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

Technical Sanction
Accorded For 40.00 lakhs.
Head of A/C P3089
CER NO : 197 Dt: 24.3.17

TA CE (YNK)